

Atty. Docket: CLON-056CIP  
USSN: 09/858,332

**In the Claims:**

1-14 (Canceled).

15. (Previously Presented) An isolated polynucleotide comprising a nucleotide sequence that encodes a metal ion affinity peptide having a formula of

$\text{NH}_2\text{-(His-Asn)}_n$  or  $\text{(His-Asn)}_n\text{-COOH}$ , where  $n=6$  (SEQ ID NO: 15).

16. (Previously Presented) The polynucleotide according to claim 15, wherein the polynucleotide comprises a nucleotide sequence encoding a fusion protein comprising a polypeptide and the metal ion affinity peptide, wherein the metal ion affinity peptide is fused to an amino- or carboxy-terminal amino acid of the polypeptide.

17. (Previously Presented) A recombinant vector comprising the polynucleotide according to claim 15.

18. (Previously Presented) A recombinant host cell comprising the recombinant vector according to claim 17.

19. (Original) The recombinant host cell according to claim 18, wherein said cell is a prokaryotic cell.

20. (Original) The recombinant host cell according to claim 18, wherein said cell is a eukaryotic cell.

21-25. (Canceled)

26. (Previously Presented) A kit for purifying a protein, comprising:

- a) the recombinant vector according to claim 17; and
- b) a metal ion affinity resin.

Atty. Docket: CLON-056CIP  
USSN: 09/858,332

27. (Original) The kit according to claim 26, further comprising:  
an extraction buffer;  
a wash buffer; and  
an elution buffer.
28. (Original) The kit according to claim 27, further comprising a column.
- 29-38. (Canceled)
39. (Previously Presented) An isolated polynucleotide comprising a nucleotide sequence that encodes a metal ion affinity peptide having a formula of  
 $\text{NH}_2\text{-(His-Asn)}_n$  or  $\text{(His-Asn)}_n\text{-COOH}$ , where  $n=3-5$  (SEQ ID NOs: 27-29) or 7-10 (SEQ ID NOs: 30-33).
40. (Previously Presented) The polynucleotide according to claim 39, wherein the polynucleotide comprises a nucleotide sequence encoding a fusion protein comprising a polypeptide and the metal ion affinity peptide, wherein the metal ion affinity peptide is fused to an amino- or carboxy-terminal amino acid of the polypeptide.
41. (Previously Presented) A recombinant vector comprising the polynucleotide according to claim 39.
42. (Previously Presented) A recombinant host cell comprising the recombinant vector according to claim 41.
43. (Previously Presented) The recombinant host cell according to claim 42, wherein said cell is a prokaryotic cell.
44. (Previously Presented) The recombinant host cell according to claim 42, wherein said cell is a eukaryotic cell.

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USSN: 09/858,332

45. (Previously Presented) A kit for purifying a protein, comprising:
  - a) the recombinant vector according to claim 41; and
  - b) a metal ion affinity resin.
  
46. (Previously Presented) The kit according to claim 45, further comprising:  
an extraction buffer;  
a wash buffer; and  
an elution buffer.
  
47. (Previously Presented) The kit according to claim 46, further comprising a column.